BUREAU OF HIGHWAYS
REQUEST FOR PROPOSAL
for
QUALIFICATIONS BASED SELECTION FOR PREQUALIFIED SERVICES

The Michigan Department of Transportation (MDOT) is seeking professional services for the project contained in the attached scope of services.

If your firm is currently prequalified for this type of work and you are interested in providing services, please indicate your interest by submitting a Proposal. The Proposal must be submitted in accordance with the latest "Vendor Selection Guidelines for Service Contracts", available on the MDOT website.

For efficiency sake, we are asking that the vendor firm provide 3 paper copies of the Proposal to Lynne Herf, the MDOT project manager named in the attached scope of services.

These copies must be received by **12 noon, April 8, 2005.** Fax and electronic copies are not acceptable.

In addition, provide one unbound copy to:

Regular Mail:
Secretary, Operations Contract Support
Michigan Department of Transportation
P.O. Box 30050
Lansing, MI 48909

OR

Overnight Mail:
Secretary, Operations Contract Support
Michigan Department of Transportation
425 W. Ottawa
Lansing, MI 48933

This copy is to be received within three working days after the due date and time specified above. Please do not deliver in person.

Any questions relative to the scope of services must be submitted by e-mail to the MDOT project manager. Any questions must be asked at least three working days prior to the due date and time specified above. All questions and their answers will be placed on the MDOT website as soon as possible after receipt of the questions. The names of vendors submitting questions will not be disclosed.

For a cost plus fixed fee contract, the selected vendor must have a cost accounting system to support a cost plus fixed fee contract. This type of system has a job-order cost accounting system for the recording and accumulation of costs incurred under its contracts. Each project is assigned a job number so that costs may be segregated and accumulated in the vendor's job-order accounting system.

The selection team will review the information submitted and will select the firm considered most qualified to perform the engineering services based on the proposals. The selected vendor will be contacted to confirm capacity. Upon confirmation, that firm will be asked to prepare a priced proposal. Negotiations will be conducted with the firm selected.

The maximum allowable pages for your proposal shall follow the guidelines detailed in Exhibit F of the Vendor Selection Guidelines (October 2004) for $100,000/$500,000. References/Past Performance (1 page limit) and QA/QC (1 page limit) are required and will be scored.

MDOT is an equal opportunity employer and MDOT DBE firms are encouraged to apply. The participating DBE firm, as currently certified by MDOT's Office of Equal Opportunity, shall be listed in the Proposal.

The scope of services is attached to this solicitation.

PROJECT LOCATION: M-59 between I-96 and Michigan in Howell Township, City of Howell, Livingston County
CONTROL SECTION, JOB NUMBER: CS 47082 JN 48762C
DESCRIPTION OF WORK: Maintaining Traffic for the Construction of a Combination Five Lane/ Four Lane Boulevard

I Primary Prequalification Classification:

Maintaining Traffic Plans & Provisions
Permanent Pavement Markings
Traffic Signal Design

II Secondary Prequalification Classification:

Subsurface Utility Engineering

The anticipated start date of the service is **6/13/05**
The anticipated completion date for the service is **3/7/06**

DBE Requirement: 0 %

MDOT Project Manager:

Lynne Herf, Project Manager
MDOT Brighton Transportation Service Center
10321 E Grand River, Suite 500
Brighton, MI 48116
Email: herfl@michigan.gov

SCOPE OF DESIGN SERVICES
CS 47082 JN 48762C
M-59 between I-96 and Michigan in Howell Township, City of Howell, Livingston County

I. SCOPE OF VENDER DUTIES

A. Prepare staging plans and special provisions for maintaining traffic during construction. The staging plans shall include any required temporary pavement construction and removal plans required for the project.

B. Prepare pavement marking plans and special provisions

C. Prepare traffic signal staging plans and special provisions for maintaining traffic during construction.

D. Prepare traffic signal plans and special provisions for permanent traffic signals (Attachment A)

E. Perform subsurface utility engineering, as directed by the University Region Design Unit. (Attachment B)

F. Complete a CPM Network for the construction of the entire project. (Attachment C)

G. Provide solutions to any unique problems that may arise during the design of this project.

H. The Vender may be required to provide Design Services during the construction phase of this project. If Construction Assistance is required, then a separate authorization for those services will be issued.

II. PROJECT LOCATION

The project is located on M-59 from I-96 to Michigan Avenue in Howell Township, City of Howell, Livingston County. The project length is 3.7 miles.

III. PROJECT DESCRIPTION

This project is currently being designed by the University Region and Lansing Bridge Design. The vender is responsible for preparing maintaining traffic plans (staging, typicals, signal staging), temporary pavement plans, pavement marking plans, traffic signal plans, and providing SUE services.

Work shall conform to current MDOT, FHWA, and AASHTO practices, guidelines, policies, and standards (i.e., Road Design Manual, Standard Plans, Drainage Manual, Roadside Design Guide, A Policy on Geometric Design of Highways and Streets, Michigan Manual of Uniform Traffic Control Devices, etc.).

IV. PROJECT CONSTRUCTION COST

A. The estimated cost of construction is: $ 43,000,000

V. PROJECT SCHEDULE

The scheduled Vender's plan completion date for this project is **12/1/05** The Vender shall use the following events to prepare the proposed implementation schedule as required in the Guidelines for the Preparation of Responses on Assigned Design Services Contracts. These dates shall be used in preparing the Vender's Monthly Progress Reports.

Target Date	Task #	Description
6/27/05	3390	Develop the Construction Zone Traffic Control Concepts
8/9/05	3540	Develop Construction Zone Traffic Control Plan
8/9/05	3552	Develop Preliminary Permanent Pavement Marking Plan
10/1/05	3822	Complete Permanent Pavement Marking Plan
10/1/05	3830	Complete the Construction Zone Traffic Control Plan
10/1/05		Submit Final Plan/Proposal Package to MDOT for final review
	3870	Hold Omissions/Errors Check (OEC) Meeting
11/1/05		Omissions/Errors Check (OEC) Meeting (approximate date)
12/1/05		Vender's Plan Completion: Final Construction Plan/Proposal package with recommendations incorporated to MDOT (two weeks after OEC Meeting)
3/1/06		Final Deliverables to MDOT

VI. PAYMENT SCHEDULE

Compensation for this Scope of Design Services shall be on an actual cost plus fixed fee basis.

VII. MONTHLY PROGRESS REPORT

On the first of each month, the Vender Project Manager shall submit a monthly project progress report to the MDOT Project Manager:

Lynne Herf, Project Manager
MDOT Brighton Transportation Service Center
10321 E Grand River, Suite 500
Brighton, MI 48116
Email: herfl@michigan.gov

The monthly progress report shall follow the guidelines in Attachment D.

VIII. FORMAT

Full size plans (cut size 24" x 36") and half size (cut size 11" x 17") consisting of plan sheets and profile sheets will be required. The project will require a ratio (scale) of 1:40.
Other plan sheets that are required for this project shall be completed by the Vender. These include, but are not limited to the following plan sheets:

A. Construction staging and traffic control plans

B. Temporary pavement plans

C. Pavement marking plans

D. Traffic signal staging sheets

E. Permanent traffic signal plans

All plans, special provisions, estimates, and other project related items shall meet all MDOT requirements and detailing practices (i.e., format, materials, symbols, patterns, and layout) or as otherwise directed by the Project Manager.

All plans, specifications, and other project related items are subject to review and approval by MDOT.

IX. UTILITIES

The Vender shall be responsible for obtaining designating/locating of specified utilities at the direction of the MDOT Project Manager, and providing the information in the format as specified in Attachment B.

X. TRAFFIC CONTROL AND MDOT PERMITS

The Vender shall be responsible for all traffic control required to perform the tasks as outlined in this Project Scope of Design Services.

The Vender shall be responsible for obtaining up to date access permits and pertinent information for tasks in MDOT Right of Way (ROW). This information can be obtained through Pam Sebenick, Utilities/Permits Section, Real Estate Division at (517) 373-7680

XI. PRE-QUALIFICATION AND SUBCONTRACTING OF CONTRACT WORK

Any task(s) for which the Vender is not prequalified must be completed by a Subcontractor that is pre-qualified for that task(s). Any questions regarding prequalification should be directed to Phil Brooks, Prequalification Manager, at (517)335-2514.

The Department's prequalification is not a guarantee or warranty of the subcontractor's ability to perform or complete the work subcontracted. The Vender remains fully responsible to the Department for completion of the work according to the authorization as if no portion of it had been subcontracted.

All subcontractor communications with the Department shall be through the Vender to the MDOT Project Manager. This requirement may be waived if a written communication plan is approved by the MDOT Project Manager.

The Department may direct the immediate removal of any subcontractor working in violation of this subsection. Any costs or damages incurred are assumed by the Vender by acceptance of the authorization. It is further understood that the Vender's responsibilities in the performance of the contract, in case of an approved subcontract, are the same as if the Vender had handled the work with the Vender's own organization.

XII. VENDER RESPONSIBILITIES (GENERAL)

1. Meet with the MDOT Project Manager to review project, location of data sources and contact persons, and review relevant MDOT operations. The Vender shall review and clarify project issues, data needs and availability, and the sequence of events and team meetings that are essential to complete the design by the project plan completion date. Attention shall be given to critical target dates that may require a large lead time, such as geotechnical requirements, ROW submittal dates, Railroad coordination requirements, utility conflict resolution, local agency meetings, etc.

2. Maintain a Design Project Record which includes a history of significant events (changes, comments, etc.) which influenced the development of the plans, dates of submittals and receipt of information.

3. **P/PMS TASK 3390 - DEVELOP THE CONSTRUCTION ZONE TRAFFIC CONTROL CONCEPTS**
   See Vender Manual for details.

4. **P/PMS TASK 3540 - DEVELOP CONSTRUCTION ZONE TRAFFIC CONTROL PLAN**
   See Vender Manual for details.

5. **P/PMS TASK 3552 - DEVELOP PRELIMINARY PERMANENT PAVEMENT MARKING PLAN**
   See Vender Manual for details.

6. **P/PMS TASK 3590 - REVIEW PRELIMINARY PLANS (THE PLAN REVIEW)**
   See Vender Manual for details.

7. **P/PMS TASK 3822 - COMPLETE PERMANENT PAVEMENT MARKING PLAN**
   See Vender Manual for details.

8. **P/PMS TASK 3830 - COMPLETE THE CONSTRUCTION ZONE TRAFFIC CONTROL PLAN**
   See Vender Manual for details.

9. **P/PMS TASK 3870 - HOLD OMISSIONS/ERRORS CHECK (OEC) MEETING**
See Vender Manual for details.

10. **P/PMS TASK 5010 - CONSTRUCTION PHASE ENGINEERING AND ASSISTANCE**
The Vender may be required to provide Design Services during the construction phase of this project. If Construction Assistance is required, then a separate authorization for those services will be issued.

11. The Vender shall be required to prepare and submit a CPM network for the construction of this project. See Attachment C for details

12. The Vender representative shall record and submit type-written minutes for all project related meetings to the MDOT Project Manager within two weeks of the meeting. The Vender shall also distribute the minutes to all meeting attendees. MDOT will provide and distribute official meeting minutes for the Base Plan Review Meeting (if meeting necessary) and The Plan Review Meeting.

13. Attend information meetings (i.e., public hearings, open houses, etc.) with the public and public officials to assist in responding to concerns and questions. May require the preparation of displays such as maps, marked-up plans, etc.

14. Attend any project-related meetings as directed by the MDOT Project Manager.

15. The MDOT Project Manager shall be the official MDOT contact person for the Vender **and shall be made aware of all communications regarding this project**. The Vender must either address or send a copy of all correspondence to the MDOT Project Manager. This includes all Subcontractor correspondence and verbal contact records.

16. The Vender shall contact the MDOT Project Manager whenever discoveries or design alternatives have the potential to require changes in the scope, limits, quantities, costs, or right-of-way of the project.

XIII. MDOT RESPONSIBILITIES (GENERAL)

1. Schedule and/or conduct the following:
    1. Project related meetings.
    2. The Plan Review
    3. Utility Meetings.
    4. Quantity summary sheets and final item cost estimates.
    5. Packaging of plans and proposal.

2. Furnish Special Details and pertinent reference materials.

3. Furnish road design plans

4. Coordinate any necessary utility relocations.

VENDER PAYMENT:

All invoices/bills for services must be directed to the Department and follow the 'then current' guidelines. The latest copy of the "Professional Engineering Service Reimbursement Guidelines for Bureau of Highways" is available on MDOT's Bulletin Board System. This document contains instructions and forms that must be followed and used for invoicing/billing; payment may be delayed or decreased if the instructions are not followed.

Payment to the Vender for Services rendered shall not exceed the "Cost Plus Fixed Fee Not to Exceed Maximum Amount" unless an increase is approved in accordance with the contract with the Vender. All invoices/bills must be submitted within 14 calendar days of the last date of services being performed for that invoice.

Direct expenses will not be paid in excess of that allowed by the Department for its own employees. Supporting documentation must be submitted, with the invoice/bill, for all billable expenses on the Project. The only hours that will be considered allowable charges for this contract are those that are directly attributable to the CE activities of this Project. Hours spent in administrative, clerical, or accounting roles for billing and support, are not considered allowable hours; there will be no reimbursement for these hours.

Reimbursement for overtime hours will be limited to time spent on this project in excess of forty hours per week. Any variations to this rule should be included in the price proposal

ATTACHMENT A
CS 47082 JN 48762C
M-59 between I-96 and Michigan in Howell Township, City of Howell, Livingston County
Traffic Signal Redesign/Construction Staging
SCOPE OF WORK

General Requirements:

1. Perform design service including the design and preparation of preliminary plans, final plans, proposal package, specifications, wiring diagrams, interconnect circuit numbers, bills of materials, measurement and payment items, and cost estimates for all construction work for this project, including necessary alterations to power, lighting, and interconnect facilities.

   This project consists of the installation of traffic signal equipment including but not limited to traffic signal controllers, traffic and pedestrian signal heads, illuminated case signs, span wire, and supporting structures (if necessary), traffic loops, and handholes. Traffic signal redesign/construction staging are required at the following locations:

   M-59@ Burkhart (47082-4)
   M-59@ BL 96 (Grand River) (47082-5)
   M-59@ Byron Rd (47082-11)
   M-59@Michigan/Oak Grove (47082-2)

   The roadway is being reconstructed and widened to accommodate a combination 5 lane/4 lane boulevard.

2. In the performance of design service, govern all project design and plan work by the applicable codes, standards, and practices of the Michigan Department of Transportation, hereinafter referred to as the department, and the current *Michigan Manual of Uniform Traffic Control Devices*.

3. Supply all materials necessary for completion of the projects, except as hereinafter described, including incidental blueprints required.

4. All documents prepared by the Vender, including tracings, drawings, estimates, specifications, field notes, investigation studies, etc., are the property of the department.

5. All plan sheets shall be developed using computer-aided drafting technology. The system shall be Intergraph Microstation, or one that processes data exactly as Intergraph will, no translations or system revisions being necessary by the department.

6. Refer to Suggested Traffic Signal Design Procedure: MDOT website.

7. Refer to Requirements for Preliminary Geotechnical Investigations for Signal

Foundations: MDOT website.

Work Program:

Task 1: Preliminary Plan Preparation

1. Make all necessary field investigations and studies of all existing overhead and underground facilities.

   a. For installation of any support structures (poles or pedestals) by the Contractor, contact Miss Dig, telephone 800-482-7171 and have them mark all underground utilities in each quadrant of the intersection. This must be done at least two working days in advance of need. The color codes for utility locating in the field are as follows:

      - Red - Electric
      - Orange - Telephone, Cablevision
      - Yellow - Gas, Oil
      - Blue - Water
      - Brown - Sewer System
      - Green - Storm Drains

   b. Show marked underground utilities on the plans with each specifically identified for use by the Contractor.

   c. If at this point, due to right-of-way and/or underground utilities, placement of a supporting structure is still in question, contact the Traffic and Safety Division, Traffic Control Devices Unit in Lansing, phone number 517-373-2323.

2. Design and develop traffic signal contract preliminary plans, engineering documents, and related work necessary for installation of temporary electronic traffic signal control devices to be accomplished by contract bid letting. Temporary traffic signal work typically includes installation of: signal support poles and/or pedestals, span wire, traffic signals, and traffic signal controller.

Task Product:

1. Two sets of preliminary plans on paper (construction details included) which contain the following:

   (a) condition diagram to nearest one foot (305 mm), scale: 1" = 30' (1:400)
   (b) possible underground and/or overhead utility conflicts
   (c) all pertinent operational features, i.e., lane line, lane usage, street width, etc.
   (d) signal phasing diagram(s)
   (e) proposed traffic signal removal (if required) and installation plan(s)
   (f) proposed traffic signal removal wiring diagram (if required) and wiring diagram(s)
   (g) List of Materials and Quantities
   (h) span calculation diagram(s)

(i) appropriate note blocks for contact persons, etc.
(j) proper file names, levels, and text sizes
(k) soil boring information including depths, soil description, water level, and depth of foundation (if required)

2. Two copies of draft special provisions and specifications and checklists of both MDOT Special Provisions and "typical" signal details to be used.

3. Submit to the Contract Maintaining Agency (if required):

   - one copy of draft special provisions and specifications
   - one copy of preliminary plans on paper with construction details included

Department Review:

The Vender submits an electronic version of the plans (via electronic mail) and preliminary plans, draft special provisions, and specifications. The department will review and return one set of the plans, special provisions, and specifications with comments. Additional plan review may be required dependent on completeness and accuracy of the initial preliminary plan submitted. MDOT will expedite their review process dependent on availability of staff.

Task 2: Final Plan Preparation

1. Incorporate the department's comments on the plans and prepare complete detailed construction final plans, supplemental specifications, special provisions, measurement and payment items, estimates of quantities, span calculations, and engineer's final estimates of cost for all necessary construction and related work included in this project.

2. During preparation of the final plans, make such alterations, corrections, and revisions to said plans and supporting materials as are deemed necessary and desirable by the department to insure conformance of plans to good design and standard practices and to have said plans and other material in proper form for receiving bids.

Task Product and Final Deliverables:

1. Upon completion of design services for this project and final approval thereof by the department, deliver to the department the following:

   a. One set of final construction plans which meet current department standards concerning: the use of ink or pencil, scale of drawing, and type of reproducible drawing material used.

   b. One set of supplemental specifications typewritten on 8½" x 11" paper (213 mm x 275 mm).

   c. One set of estimates of cost of construction, typewritten on 8½" x 11" paper (213 mm x 275 mm).

   d. One copy of all design computations and layout sheets as required for use by the department.

   e. Upon request by the department, make available thereto all notes utilized in preparation of

the plans, supplemental specifications, and cost estimates.

f. One copy on a CD and/or one electronic copy of all production drawings in Intergraph Microstation file format. Refer to MDOT website.

Information Services to be Provided by the Department:

- Control section numbers
- Job numbers
- Title sheet
- Appropriate Traffic and Safety Notes
- Availability of photolog
- Available signal design plans and/or layout drawings for each location
- Available signal phasing or operational information for each location
- **Items available on MDOT's website - www.mdot.state.mi.us**
  (Select: Doing Business with MDOT, Traffic & Safety Services, Typicals/Details/Guides)

  1. Signal Details
     - MDOT Typical Signal Construction Detail Sheets
     - MDOT Typical Signal Information Note Sheet
     - MDOT Typical Signal Legend Sheet
  2. Signal Special Provisions
     - MDOT Special Provisions
     - MDOT Supplemental Specifications
  3. Traffic Vender Files
     - Cell libraries
     - Microstation information
     - CAD instructions for venders
     - MDOT sample layouts
     - MDOT Suggested Traffic Signal Design Procedure
     - MDOT Requirements for Preliminary Geotechnical Investigations for Signal Foundations
     - Method of Measurement and Basis of Payment for Signal Contracts
     - Signal Span Calculation Program (non-disclosure statement required)
  4. Traffic Guidelines
     - Traffic Signal Head Placement Diagrams

Reference Documents and Standards to be Used:

- National *Manual of Uniform Traffic Control Devices*
- *Michigan Manual of Uniform Traffic Control Devices* (MMUTCD)
- *Michigan Vehicle Code*
- Local and national electrical codes
- MDOT Standards, Specifications, and Construction Details

- MDOT Pay Item Code Book

From this list, the following documents can be ordered from MDOT Financial Services Division (517-335-2519). The Vender must pay the cost.

- MMUTCD
- MDOT 2003 Standard Specifications for Construction
- MDOT Pay Item Code Book

Project Coordination:

Coordinate design service with MDOT, Traffic and Safety Division, Traffic Control Devices Unit (517-373-2323); overhead and/or underground utility/telephone companies; Miss Dig (800-482-7171).

Project Schedule:

Prepare and submit to the department a Gantt Chart schedule for each task and total calendar days for completing the project. The work shall be completed commencing from the date of work authorization to the Vender. The time allocated for any necessary utility coordination meeting, soil boring investigations, and the department review shall be shown in the Vender's work schedule.

ATTACHMENT B
CS 47082 JN 48762C
M-59 between I-96 and Michigan in Howell Township, City of Howell, Livingston County
S.U.E. SCOPE OF SERVICES

It is the intent of this scope that the Venders selected as a result of this solicitation employ qualified, competent, and experienced personnel to provide the services set forth herein. The Vender will primarily provide quality level A & B information as described in FHWA Subsurface Utility Engineering publications. See attachment. There may be occasions, very early in the design process, were quality level C & D information is required. These services will be accomplished fully by the Vender so that it will be unnecessary for the Department to supplement any of them with its own personnel, except as noted hereinafter. The Department may, however, review the work from time to time to verify accuracy and evaluate the performance of the firm. The following items are not intended to be comprehensive or exclusive; they are merely set forth as a general outline of the work that is expected.

Prior to submission of the PRICED proposal, the Vender shall meet with the MDOT Project Manager to finalize the limits of designating and locating.

2.1 Designating

For the purpose of this scope, "designate" means to indicate the presence and horizontal location of underground utilities using geophysical prospecting techniques, including electromagnetic, magnetic, sonic, or other energy fields. This work is considered quality level B.

The Vender shall -

1. Obtain all necessary permits from city, county, municipality, railroad or other entity to allow the Vender to work on existing streets, roads, and private property for the purpose of marking, measuring, and recording the location of existing underground utilities.

2. Coordinate with utility companies and the appropriate governmental jurisdictions in researching the location(s) of existing utilities. Secure all "as built" plans, plats, and other necessary data as supplied by the utility companies. While obtaining the information from the utility companies or governmental jurisdictions, ascertain the age, the size, the material type, the general condition, etc… of the utility.

3. Designate, record, and mark the horizontal location of existing underground utilities and their major laterals to existing buildings. No storm sewers are to be designated unless required on an exception basis. Utility designations shall be in accordance to the conventions indicated in MDOT's Road Design Manual. CADD files shall be submitted to the Department on CD(s), in CADD format, compatible with the Department's Intergraph

MicroStation SE format system. All survey work will be the responsibility of the Vender. Horizontal surveying of underground utilities shall be accurate to applicable standards.

4. Record and mark the horizontal location of existing poles for overhead utility facilities. The Vender does not have to determine the overhead utility owners, simply the horizontal position of the poles. In addition, the Vender shall note the location of existing overhead crossings of the existing roadway.

5. Provide all necessary equipment and support personnel, including surveying capability, to secure the data outlined in this section.

The Department will -

1. Provide survey control for the purposes of tying the horizontal position of the designated utilities to the State Plane Coordinate System and the project limits, including side roads. If available, the Department will also furnish highway plans showing topography, horizontal alignments, etc… in an electronic or paper form.

2. Provide a preliminary list of utility companies and address within the project limits. This list may not be 100% accurate and/or complete. The Vender is responsible to identify all known and unknown utility facilities within the project limits.

3. If requested, provide a letter of introduction to utilities, to assist the Vender in establishing the need for their presence in a particular area.

2.2 Locating

For the purpose of this proposal, "locate" means to obtain horizontal and vertical position of the utility line by excavating a test hole. The test holes shall be done using vacuum excavation or comparable nondestructive equipment in a manner as to cause no damage to the utility line. After excavating a test hole, the Vender shall perform a field survey to determine the exact location and position of the utility line. This work is considered quality level A.

The Vender shall -

1. Pick up and review plans furnished by the Department showing areas requiring location (test hole) sites within the project limits. Recommend changes to the Department's location plan based upon S.U.E. best practices. Obtain company records as required.

2. Obtain all necessary permits from city, county, municipality, railroad or other entity to allow the Vender to work on existing streets, roads, and private property for the purpose of marking, measuring, and recording the location of existing underground utilities.

3. Comply with any and all State Law requirements for notification prior to excavation. In conformance with Public Act 53 of 1974, Michigan's one call damage prevention system "Miss Dig", the Vender is required to phone 1-800-482-7171 a minimum of three full working days (excluding Saturdays, Sundays, and Holidays) prior to excavating near a utility.

4. Coordinate with utility company inspectors as required.

5. Neatly cut and remove existing paving with the cut area not to exceed 225 square inches. Excavate using a method enabling vertical and horizontal exploration through this cut.

6. Excavate test holes in such a manner as to prevent any damage to wrappings coatings, or other protective coverings, such as vacuum excavation, hand digging, etc…

7. Be responsible for any damage to the utility during excavation.

8. Backfill with approved material around utility structure.

9. Furnish, install, and color code a permanent above ground marker (i.e. P.K. nail, peg, steel pin, or hub) directly above the centerline of the structure and record the elevation of the marker.

10. Provide a permanent restoration of the pavement within the limits of the original cut at the time of backfill. If the test hole is excavated in an area other than the roadway pavement, the area disturbed shall be restored to equal or better than the condition before excavation.

11. Tie all vertical elevations to a minimum of two checked benchmarks or available datum. The accuracy of these turns shall be in accordance with established surveying practices. Utility locations shall be returned to the Department in a digital format compatible with the Department's CADD systems (Intergraph MicroStation SE). Elevations shall have an accuracy of +/- 0.05 ft.

12. Close out permits as required.

13. Maintain the quality of the permanent pavement restoration for 3 years.

The Department will -

1. Provide survey control for the purposes of tying the horizontal and vertical position of the located utilities to the State Plane Coordinate System and the project limits, including side roads.
2. Furnish preliminary highway plans showing topography, horizontal alignments, vertical alignments, proposed edge of pavements, construction limits, drainage, existing utilities, etc… in an electronic or paper form. The plans will also show areas requiring location (test hole) sites.

3. If requested, provide a letter of introduction to utilities, to assist the Vender in establishing the need for their presence in a particular area.

2.3 Permits and Traffic Control

A permit (form #2205) and certificate of insurance (form #'s 2020 & 2216) shall be required from all S.U.E. providers. These shall be submitted to the Department's Lansing Real Estate Division. An advance notice of permitted activity (form #2204) shall be submitted to the appropriate region/tsc office not less than five days prior to working within the right of way.

All maintaining traffic provisions of the permit shall be followed, as well as conformance to the requirements of Part 6 (C) of the Michigan Manual of Uniform Traffic Control Devices. If the site conditions are not addressed in the Michigan Manual of Uniform Traffic Control Devices, the Vender shall submit a written traffic plan to the region/tsc for approval. The Vender shall be responsible for providing all materials, equipment and personnel necessary for the maintenance of traffic. This includes, but is not limited to; temporary traffic control signs, channelizing devices, arrow panels, traffic barriers (i.e. temporary concrete barriers if required), impact attenuators, flaggers, temporary pavement markings, etc… and all other equipment and/or labor necessary to effectively implement the approved maintenance of traffic plan.

Due to the amount of traffic on certain highways, the Vender may be required to work off peak hours. In addition, the Vender shall not work on weekends, national holidays, state holidays, or the days proceeding said holidays without the written permission from the jurisdictional Rgion/TSC ffice.

2.4 Data Management

Data management involves assembling and presenting designating and locating information in a format compatible with the Department's CADD systems (Intergraph MicroStation SE) for use by the Department's staff or the Department's designated Vender.

2.5 Training

The Vender shall participate in and conduct portions of training sessions for Department personnel. The sessions will be at a location provided by the Department. The topics of the training sessions will typically be:

1. S.U.E. invoicing and billing.

2. S.U.E. data management.

3. S.U.E. best uses and practices.

4. S.U.E. equipment demonstrations.

2.6 Time to Complete Work

The Vender shall complete and deliver designating services within 30 calendar days after the notice to proceed on each project is given. The Vender shall complete and deliver locating services within 30 calendar days after the notice to proceed on each project is given. The Vender shall complete and deliver design services within a mutually agreed upon time after the notice to proceed on each project is given.

2.7 Deliverables and Certification

1. All completed designating and locating services shall be certified by an licenced professional civil engineer and licenced professional surveyor. Both of these professionals must be registered in the State of Michigan and a permanent employee of the consulting firm. The Vender shall be responsible for the accuracy of all information presented to the Department.

2. Four complete copies of all the deliverable shall be sent to the Lansing Utilities and Permits Office.

3. Provide colored coded sets of reproducible, standard-size (cut size 36" x 24") plan sheets created from the construction plan tracings of affected sheets with the utilities overlaid.

4. Provide the following test hole information on a certification form to the Department in a digital format compatible with the Department's CADD system (Intergraph MicroStation SE1):
   a. Elevation of top and/or bottom of utility tied to datum of the furnished plan.

   b. Elevation of existing grade over the utility at the test hole.

   c. Horizontal location referenced to project coordinate datum.

d. Outside diameter of pipe or width of duct banks and configuration of non-encased multiconduit systems.

e. Utility structure material composition and condition, if possible.

f. Size, type and owner of utility facility.

5. Determine and inform the Department of the approximate depth of all existing utilities as determined by subsurface utility designating techniques when readings appear valid. This depth indication is understood by both the Vender and the Department to be approximate only and is not intended to be used in the final design.

ATTACHMENT C
CS 47082 JN 48762C
M-59 between I-96 and Michigan in Howell Township, City of Howell, Livingston County

CONSTRUCTION CRITICAL PATH NETWORKS

I. INTRODUCTION

The Vender is required to submit a Construction Critical Path Network at various points in the design process. Refer to the following:

P/PMS TASK 3580 - DEVELOP PRELIMINARY PLANS

P/PMS TASK 3830 - COMPLETE THE CONSTRUCTION ZONE TRAFFIC CONTROL PLAN

P/PMS TASK 3840 - DEVELOP FINAL PLANS AND SPECIFICATIONS

Construction Critical Path Networks are often needed to develop the progress schedule for a project. They are required on any project designated to include an Incentive/Disincentive or Special Liquidated Damages clause. Construction Critical Path Networks are also recommended for projects with the following characteristics:

1. New construction.
2. Major reconstruction or rehabilitation on an existing roadway that will severely disrupt traffic.
3. Unique or experimental work.
4. More than one construction season.
5. Complex staging (multiple stages with traffic shifts).

As noted in MDOT's Construction and Technology Instructional Memorandum 1997-7, Progress Schedule Determinations/Critical Path Rates,

> A*preparation of a Critical Path is a requirement on <u>all</u> vender-designed projects, regardless of the project type or complexity.*@

The MDOT Resident Engineer assigned to the project should be consulted when developing Construction Critical Path Networks.

MDOT requires the precedence diagraming method. The Vender will submit this network in MPX version 4.0.

II. NETWORK DEVELOPMENT

The network will be defined using the following steps.

1. Activity definition.
2. Activity sequencing.
3. Duration estimation.
4. Schedule development.

1. ACTIVITY DEFINITION

The Vender will define the specific activities in enough detail so that the proper objectives will be met. The Vender must identify assumptions (those factors considered true, real or certain). Supporting detail for the activities should be documented and organized as needed to simplify the review of the activities by MDOT personnel.

The Construction Critical Path Network must start with the ALetting Date@ as the first activity and terminate with the AEnd of Project@ as the finish activity.

A sufficient number of activities will be required with sufficient detail so that the controlling construction operation(s) may be identified. Notation on each activity shall include a brief work description and activity time duration.

2. ACTIVITY SEQUENCING

Activity sequencing involves identifying and documenting interactivity dependencies. The Vender must sequence activities accurately to support later development of a realistic and achievable construction schedule. Two types of dependencies should be considered. Mandatory dependencies are inherent in the nature of the work being done, such as construction sequencing. Discretionary dependencies are based on a knowledge of the work to be done. Constraints are used to show how the activities relate to each. The Vender must include documentation supporting all discretionary dependencies used in the project. All activities must lead to another activity. Only Start to Start, Finish to Finish and Finish to Start relationships will be allowed. All logic shall show how the given activity is dependent on its preceding activities.

3. DURATION ESTIMATION

After the Vender has sequenced the activities, the Vender should determine the activity duration. Activity duration estimating involves assessing the number of work periods likely to be needed to accomplish each activity. Duration (working days): No activity will have a duration greater than 20 working days unless approved by the Engineer. Activities that will be allowed to exceed 20 working days include, but are not limited to, working drawing approvals or other activities not under the control of the Contractor. If

requested by the Engineer, the Vender shall explain the reasonableness of activity time durations. The approved MDOT production rates will be used in estimating activity duration. These are available in the Supplemental Information section of this attachment. The Vender must document and submit all assumptions made during the duration estimation to MDOT.

4. SCHEDULE DEVELOPMENT

The activity sequencing, duration estimations and the calendars are combined to create the construction schedule. During the development of the schedule the Vender will verify:

1. The required schedule to build the project.
2. The constructability of the project.
3. If the maintaining traffic scheme will work.
4. If seasonal limitations will affect the construction.
5. Any other project specific considerations.

The MDOT Calendars will be used by the Vender in developing the network. The calendars are based on a 4, 5 or 6 day work week. The MDOT Calendars are included in the Supplemental Information section of this attachment.

At this point there should be no negative float in the network. If there is, there is an error in the network and the error must be corrected before network submittal.

All summary tasks shall be removed prior to submittal to MDOT Project Manager

III. DELIVERABLES

After this final step the design vender will submit the finished CPM schedule to MDOT

1. Documents

A. 11" x 17" plot of the network. The critical path shall be clearly identified on the plot. A larger plot may be required for complex networks.

B. Work Day / Completion Date Determination Worksheet.

C. List of any other assumptions or controlling factors used in creating the network. For example, permit or maintaining traffic restrictions.

2. Electronic Format

This section sets the requirements for the electronic submittal of the Vender=s Construction Network. All networks shall be submitted on a 3.5 inch floppy disk (or via E-mail) using one of the following formats:

A. **Standard Electronic Media Format:** This is a standard ASCII text file containing the data elements below, in the order specified. This file can be created using any text editor or word processing application (i.e., MS-Word, WordPerfect, Notepad, Write) but must be saved as an ASCII file.

The **first line** will provide a descriptive header describing the submittal and containing:

Control Section
Job Number
Route
Vender name
Date of Submittal

The next line will be **blank**, followed by multiple data lines.

Each **data line** will contain one record pertaining to one task of the job. Separate data fields by a comma. Fields within each task line are as follows:

(Note that the term "task" is synonymous with "activity." Leave fields that are not required blank)

(1) Task # (Job # followed by a hyphen followed by this task's unique 4 digit task number. This is the Preceding Event Activity Code)
(2) Description of Task, Milestone or Hammock, blank if this record is a constraint
(3) Calendar (see attached list)
(4) Duration of task, blank for constraints
(5) Task # of the next task (Succeeding Event) - leave blank if this record is not a constraint or hammock
(6) Type of constraint (FS, SS, FF) - leave blank if this record is not a constraint.
(7) Delay, if required
(8) Original "Baseline" Start Date
(9) Original "Baseline" Finish Date
(10) Current (forecast) Start Date (early start)
(11) Current (forecast) Finish Date (early finish)
(12) Estimated completion date (if different from early start + current duration)
(13) Late Start Date
(14) Late Finish Date
(15) Actual Start Date

(16) Actual Finish Date

Example - each line contains the following:

Task # (preceding event), Description, Calendar, Duration, Next Task # (succeeding event), Constraint Type, Delay, Baseline Start, Baseline Finish, Early Start, Early Finish, Estimated Completion Date, Late Start, Late Finish, Actual Start, Actual Finish, Total Float.

B. **Primavera Project Planner(P3) 2.0 Export Procedure:** Users who have Primavera Project Planner(P3) version 2.0 can automatically create a export file by following the below export procedure below. **Users having an older version of Primavera may use the applications export feature only if they are able to include all the data elements listed in the version 2.0 format.**

1. Choose Tools, Project Utilities, **EXPORT**

2. Click **ADD**, Then click **OK** to accept the next sequential ID number, or type a unique number to identify the specifications and click **OK**

3. Enter a description for the specification in the Title field

4. Specify data items to export

Activities
- Select **Contents of List**
- Use the Description column to specify which data items to export
- To add items, click the right mouse button in the Description column and choose from the list. Suggested Items include: **Activity ID, Activity Description, Actual Start, Actual Finish, Calendar ID, Early Start, Early Finish, Late Start, Late Finish, Original Duration.**
- Select **All Current, All Target**, or **All Target2**
- Set Description Length to 48

OR

Constraints
- Select **Successor relationships** - Choose this option to export Activity IDs and their corresponding successors only. Lags and relationship types will also be displayed in this output file.

5. Click **FORMAT** in Export Dialog Box

6. In the Output file section, enter a new name and path (ex. A:\actexp or A:\conexp). Do not include a file extension.

7. In the type field, click the minimize button and choose the **[.PRN] - ASCII** file format for the output file.

8. Select **CALENDAR** for Date Format
9. Set ASCII Output Field Separation to **1** and Blank column width to **0**
10. Click **RUN**
11. In the Output Options dialog box, click on **OK**

NOTE: A COMPLETED FILE EXPORT WILL CONSIST OF 2 EXPORT FILES (ACTIVITIES & CONSTRAINTS)

C. **Microsoft Project Export Procedure:** Users of Microsoft Project Version 4.0 and above can create a Microsoft Project Exchange (MPX) file by following the procedure below.

1. Choose File, Save As from the main menu
2. In the Save File as Type box Select **MPX 4.0**
3. On the drive box select a: or whichever drive is the 3.5" Floppy drive
4. Click on **OK**

This saves the file in MPX format.

D. **Primavera Sure Track:** Users of Sure Track Version 2.0 and above can create a Microsoft Project Exchange (MPX) file by following the procedure below.

1. Choose File, Save As from the main menu
2. In the filename box input a filename
3. In the Save File as Type box Select **MPX**
4. On the drive box select a: or whichever drive is the 3.5" Floppy drive
5. Click on **OK**

This saves the file in MPX format

E. **Scitor Project Scheduler 7 Export Procedure:** Users of Scitor Project Scheduler Version 7 and above can create a Microsoft Project Exchange (MPX) file by following the procedure below.

1. Choose File, Save As from the main menu
2. In filename box select a filename
3. In the Save File as Type box Select MPX
4. On the drive box select a: or whichever drive is the 3.5" Floppy drive
5. Click on **OK**

This saves the file in MPX format

F. **Export Files with Other Scheduling Applications:** Most scheduling packages have export functions similar to those described above. If the Vender chooses to use packages with export capabilities, they shall include all items listed in the Standard Media Format in a text or ASCII type file.

IV. SUPPLEMENTAL INFORMATION

A. MDOT CRITICAL PATH-CONSTRUCTION TIME ESTIMATES

See chapter 14 of the Road Design Manual section 14.49 and appendix B.

B. WORKSHEET

WORK DAY/COMPLETION DATE DETERMINATION

CS: _____ JN:

DESCRIPTION OF WORK: _____

MAJOR WORK ITEM	PRODUCTION QUANTITY	RATE	ESTIMATED TIME

TOTAL ESTIMATED TIME:

COMPLETION DATE: _____ (Calendar Days or Work Days)

COMMENTS:

_____
_____
_____
_____
_____

C. MDOT CALENDARS

The following are the MDOT 4, 5 and 6 day calendars:

CALENDAR	DESCRIPTION	START	FINISH
1	Std - Apr 16 - Nov 15 - 4 day	APR 16	N0V 15
2	LP - Bit Stab - 4 day	MAY 15	OCT 15
3	UP - Bit Stab - 4 day	JUN 01	OCT 01
4	LP S of M-46 - Bit Pave - 4 day	MAY 05	NOV 15
5	LP N of M-46 - Bit Pave - 4 day	MAY 15	NOV 01
6	UP - Bit Pave - 4 day	JUN 01	OCT 15
7	LP - Bit Seal Coat - 4 day	JUN 01	SEP 15
8	UP - Bit Seal Coat - 4 day	JUN 15	SEP 01
9	Tree Planting - Deciduous - 4 day	MAR 01 OCT 01	MAY 15 NOV 15
10	Tree Planting - Evergreen - 4 day	MAR 01	JUN 01
11	South LP - Restoration - 4 day	MAY 01	OCT 10
12	North LP - Restoration - 4 day	MAY 01	OCT 01
13	UP - Restoration - 4 day	MAY 01	SEP 20
14	Full Year - Winter Work - 4 day	JAN 01	DEC 31
21	Std - Apr 16 - Nov 15 - 5 day	APR 16	NOV 15
22	LP - Bit Stab - 5 day	MAY 15	OCT 15
23	UP - Bit Stab - 5 day	JUN 01	OCT 01
24	LP S of M-46 - Bit Pave - 5 day	MAY 05	NOV 15
25	LP N of M-46 - Bit Pave - 5 day	MAY 15	NOV 01
26	UP - Bit Pave - 5 day	JUN 01	OCT 15
27	LP - Bit Seal Coat - 5 day	JUN 01	SEP 15
28	UP - Bit Seal Coat - 5 day	JUN 15	SEP 01
29	Tree Planting - Deciduous - 5 day	MAR 01 OCT 01	MAY 01 NOV 15

30	Tree Planting - Evergreen - 5 day	MAR 01	JUN 01
31	South LP - Restoration - 5 day	MAY 01	OCT 10
32	North LP - Restoration - 5 day	MAY 01	OCT 01
33	UP - Restoration - 5 day	MAY 01	SEP 20
34	Full Year - Winter Work - 5 day	JAN 01	DEC 31
35	Full Year - Expedited - 6 day	JAN 01	DEC 31

ATTACHMENT D
CS 47082 JN 48762C
M-59 between I-96 and Michigan in Howell Township, City of Howell, Livingston County

MONTHLY PROGRESS REPORTS

The first two pages of this attachment are the necessary layout of the Monthly progress reports and the last three pages are a completed example.

Control Section 00000
Job Number 00000C
Structure Number S00
Date 00/00/00

MONTHLY PROGRESS REPORT

A. Work accomplished during the previous month.

B. Anticipated work items for the upcoming month.

C. Real or anticipated problems on the project.

D. Update of previously approved detailed project schedule (attached), including explanations for any delays or changes.

E. Items needed from MDOT.

F. Copy of Verbal Contact Records for the period (attached).

Structure Number - Control Section - Job Number
Route, Location Description
Design Schedule as of 00/00/95

LIST TASKS, SUBMITTALS, APPROVALS AND MEETINGS AS OUTLINED IN SCOPE OF DESIGN SERVICES AS NEEDED. THIS LIST IS JUST AN EXAMPLE.

Original Authorized Start Date	Original Authorized Finish Date	(Anticipated) or **Actual** Start Dates	(Anticipated) or **Actual** Finish Dates	Task	Task Description
00/00/00	**00/00/00**	00/00/00	**00/00/00**	??	Initial project meeting.
00/00/00	**00/00/00**	00/00/00	**00/00/00**	3330	Conduct Design Survey..
00/00/00	**00/00/00**	00/00/00	**00/00/00**	3360	Prepare Base Plans
00/00/00	**00/00/00**	00/00/00	**00/00/00**		Submit Base Plans
00/00/00	**00/00/00**	00/00/00	**00/00/00**	3580	Develop Preliminary Plans
00/00/00	**00/00/00**	00/00/00	**00/00/00**	3390	Develop Construction Zone Traffic Control Concepts
00/00/00	**00/00/00**	00/00/00	**00/00/00**	3540	Develop Construction Zone Traffic Control Plan
00/00/00	(00/00/00)	00/00/00	**00/00/00**	3550	Develop Preliminary Traffic Operations Plan.
00/00/00	(00/00/00)	00/00/00	**00/00/00**	3351	Review & Submit of Preliminary Right-Of-Way Plans.
00/00/00	(00/00/00)	00/00/00	**00/00/00**		Submittal of The Plan Review Package.
00/00/00	(00/00/00)	00/00/00	**00/00/00**		Completion of the Plan Review Meeting.
00/00/00	(00/00/00)	00/00/00	**00/00/00**	3840	Develop Final Plans and Specifications
00/00/00	(00/00/00)	00/00/00	**00/00/00**		Submittal of final plans/proposal package to MDOT for final review.
00/00/00	**00/00/00**	00/00/00	**00/00/00**	3870	Omissions/Errors Check (OEC) Meeting
00/00/00	**00/00/00**	00/00/00	**00/00/00**		Vender=s Plan Completion: Final Construction Plan/Proposal package with recommendations incorporated to MDOT (two weeks after OEC Meeting)

Control Section 12345
Job Number 11111C
Structure Number S02
Date 07/31/95

MONTHLY PROGRESS REPORT

A. Work accomplished during the previous month.

1. During the last month we completed the Final Right of Way plans and submitted them to Thomas Nelson, Jr. on 05/01/99.

B. Anticipated work items for the upcoming month.

1. Submit the Preliminary Plans and related material on 03/11/99.

2. Attend the meeting regarding the Ameritech lines on the bridge, scheduled for 03/12/99.

C. Real or anticipated problems on the project.

1. We foresee no problems at this time.

D. Update of previously approved detailed project schedule (attached), including explanations for any delays or changes.

1. The design is falling behind schedule because we had problems resolving the geometries of the ramps in relation to the bridge. The Preliminary Plan submittal will be the only task affected by this delay because we will make up the lost time prior to submitting the Final Plans and Specifications.

E. Items needed from MDOT.

1. Prior to final Plan submittal we will need the latest Special provision and Supplemental Specification checklist.

F. Copy of Verbal Contact Records for the period (attached).

1. Discussed bridge and ramp geometries with Tom Myers of M$DOT Traffic and Safety Division on 07-24-95.

SN: S02 - CS: 12345 - JN: 11111C
M-111, from There Village Limits to north of That Road
Design Schedule as of 07/31/95

Original Authorized Start Date	Original Authorized Finish Date	(Anticipated) or **Actual** Start Dates	(Anticipated) or **Actual** Finish Dates	Task	Task Description
01/12/95	01/12/95	**01/12/95**	**01/12/95**??	Initial project meeting.	
01/29/95	01/29/95	**01/30/95**	**01/30/95**3330	Conduct Design Survey.	
02/17/95	04/10/95	**02/17/95**	**04/20/95**3360	Prepare Base Plans.	
02/29/95	02/29/95	**02/29/95**	**02/29/95**3390	Develop the Construction Zone Traffic Control Concepts	
03/12/95	03/13/95	**03/12/95**	(03/30/95)	3540	Develop Construction Zone Traffic Control Plan
03/20/95	03/19/95	**03/25/95**	(03/30/95)	3551	Develop/Review Preliminary Traffic Signal Plan
07/01/95	07/01/95	(07/01/95)	(07/01/95)	3590	The Plan Review Meeting
07/11/95	08/11/95	(07/11/95)	(08/11/95)	3821	Complete/Review Traffic Signal Plan
09/15/95	09/15/95	(09/15/95)	(09/15/95)	3830	Complete Construction Zone Traffic Control Plan.
09/16/95	09/16/95	(09/16/95)	(09/16/95)	3840	Develop Final Plans and Specifications
09/25/95	09/23/95	(09/25/95)	(09/25/95)	3870	Omissions/Errors Check (OEC) Meeting

VERBAL CONTACT RECORD

Control Section 12345
Job Number 11111C
Structure Number S02
Date 07/31/95

Joe Engineer talked to Tom Myers and decided to use a 0.05'/ft super on ramp A leading into the bridge.

P/PMS TASK - INDEX - VERSION 2 rev 2

ISSUED 9/29/2000

P/PMS TASK	CURRENT DATE	LATEST REVISION DATE
3120 - CONDUCT STRUCTURE DECK CONDITION SURVEY	07/29/99	
3330 - CONDUCT DESIGN SURVEY	07/29/99	
3340 - CONDUCT STRUCTURE SURVEY	07/29/99	
3350 - CONDUCT HYDRAULICS SURVEY	07/29/99	
3360 - PREPARE BASE PLANS	06/22/99	
3361 - REVIEW AND SUBMIT PRELIMINARY RIGHT OF WAY (PROW) PLANS	07/16/99	
3370 - PREPARE STRUCTURE STUDY	06/16/99	
3380 - REVIEW BASE PLANS	06/29/99	
3390 - DEVELOP THE CONSTRUCTION ZONE TRAFFIC CONTROL CONCEPTS	07/16/99	
3510 - PERFORM ROADWAY GEOTECHNICAL INVESTIGATION	07/29/99	
3520 - CONDUCT HYDROLOGIC, HYDRAULIC AND SCOUR ANALYSES	08/29/00	revised per P. Schriner
3530 - CONDUCT FOUNDATION STRUCTURE INVESTIGATION	07/16/99	
3540 - DEVELOP CONSTRUCTION ZONE TRAFFIC CONTROL PLAN	07/16/99	
3551 - DEVELOP/REVIEW PRELIMINARY TRAFFIC SIGNALS PLAN	07/16/99	added to index 1/5/2000
3552 - DEVELOP PRELIMINARY PERMANENT PAVEMENT MARKING PLAN	07/16/99	
3553 - DEVELOP PRELIMINARY NON - FREEWAY SIGNING PLAN	07/16/99	
3554 - DEVELOP PRELIMINARY FREEWAY SIGNING PLAN	07/16/99	
3570 - PREPARE PRELIMINARY STRUCTURE PLANS	07/16/99	
3580 - DEVELOP PRELIMINARY PLANS	06/30/99	
3581 - FINAL RIGHT-OF-WAY PLANS	07/16/99	

P/PMS TASK	CURRENT DATE	LATEST REVISION DATE
3590 - REVIEW PRELIMINARY PLANS	06/29/99	
3670 - DEVELOP MUNICIPAL UTILITY PLANS	06/30/99	
3675 - DEVELOP ELECTRICAL PLANS	07/01/99	
3710 - DEVELOP REQUIRED MITIGATION (FOR INFORMATION ONLY, THIS IS NOT A VENDER TASK)	07/16/99	
3720 - SUBMIT ENVIRONMENTAL PERMIT APPLICATIONS (FOR INFORMATION ONLY, THIS IS NOT A VENDER TASK)	07/16/99	
3821 - COMPLETE/REVIEW TRAFFIC SIGNAL PLANS	07/16/99	
3822 - COMPLETE PERMANENT PAVEMENT MARKING PLAN	07/16/99	
3823 - COMPLETE NON-FREEWAY SIGNING PLAN	07/16/99	
3824 - COMPLETE FREEWAY SIGNING PLAN	07/16/99	
3830 - COMPLETE CONSTRUCTION ZONE TRAFFIC CONTROL PLAN	06/22/99	
3840 - DEVELOP FINAL PLANS AND SPECIFICATIONS	07/02/99	
3850 - DEVELOP STRUCTURE FINAL PLANS AND SPECIFICATIONS	07/29/99	
3870 - HOLD OMISSIONS/ERRORS CHECK (OEC) MEETING	07/13/99	
4120 - OBTAIN PRELIMINARY TITLE COMMITMENTS	06/29/99	
4130 - PREPARE MARKED FINAL R.O.W. PLANS	06/29/99	
4140 - PREPARE PROPERTY LEGAL INSTRUMENTS	06/29/99	
5010 - CONSTRUCTION PHASE ENGINEERING ASSISTANCE	07/29/99	